

ABSTRACT

A optical disk drive determines an optimum radiating power of laser for recording data in accordance with an asymmetry value or amplitude of a read signal. The optical disk drive includes an offset controller for changing a focus offset of laser in a direction of an optical axis to a focal point on an optical disk, a pre-test data recorder for recording pre-test data in a trial write area provided on the optical disk with the laser having a power kept in constant while the focus offset is changed by the offset controller, an offset detector for detecting a focus offset that minimizes an asymmetry value of a read signal of the pre-test data, a power controller for recording an Optimum Power Control (OPC) test data in the trial write area while changing the power of the laser, and an OPC operator for determining an optimum power of the laser in accordance with an asymmetry value of a read signal of the OPC test data.